

## CONCENTRATION

The program called Concentration and is based on the age old game of the same name. Between ten and fifty cards can be selected to appear on the screen. Behind these cards are randomly hidden pairs of cards. The game is finished when all the pairs of cards have been uncovered.

This program is a real test of your concentration.

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Leopold Vic.

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12 REM A GAME OF CONCENTRATION
13 REM BY L.J. VELLA
14 REM 1986
15 POKE30744,1
16 REM 17-24 PREPARE FOR INTRODUCTION
17 DATA 28672,28688,28928,28944,175,198,227,245
18 DIM J(4):DIM H(4)
19 FOR B=1 TO 4
20 READ J(B)
21 NEXT
22 FOR B=1 TO 4
23 READ H(B)
24 NEXT
25 IF PEEK(28672)=159 GOTO 47
26 CLS
27 REM 28-39 DRAWS INTRODUCTION
28 GOTO 34
29 POKE AF,AG
30 AH=AH+1:IF AH=16 THEN AH=0:AF=AF+16
31 AF=AF+1
32 AI=AI+1:IF AI=128 GOTO 34
33 GOTO 29
34 SOUND 31,1
35 AJ=AJ+1
36 IF AJ=5 THEN GOTO 46
37 AG=H(AJ):AF=J(AJ)
38 AH=0:AI=0
39 GOTO 29
46 GOSUB 10180
47 CLS:PRINT@100,"DO YOU WANT INSTRUCTIONS"
48 PRINT@172,"(Y OR N)":FOR B=1 TO 300:NEXT
49 F$=INKEY$
50 H$=INKEY$:IF H$="" GOTO 49
60 IF H$="Y"OR H$="N" GOTO 70
62 CLS:PRINT@99,"YOU DID NOT PRESS (Y OR N)"
63 GOSUB 12300
64 GOTO 47
70 IF H$="Y"GOSUB 10620
71 CLS
72 POKE30744,1
73 GOSUB 10480
74 GOSUB 10240
75 DIM A(99):REM 75-180 NUMBER POSITION
76 DATA 28706,28709,28712,28715,28718,28721,28724,28727,28730
77 DATA 28733,28770,28773,28776,28779,28782,28785,28788,28791
79 DATA 28794,28797,28834,28837,28840,28843,28846,28849,28852
80 DATA 28855,28858,28861,28898,28901,28904,28907,28910,28913
100 DATA 28916,28919,28922,28925,28962,28965,28968,28971,28974
120 DATA 28977,28980,28983,28986,28989
140 FOR B=1 TO 50
160 READ A(B)
180 NEXT B
190 REM 200-290 GRAPHIC CHARACTERS
200 DIM C(25)
220 DATA 208,239,175,191,255,223,143,227,217,188,165,133,172
240 DATA 243,140,231,179,163,252,131,185,250,136,169,184
260 FOR B=1 TO 25
280 READ C(B)
290 NEXT
295 REM 300-390 SHUFFLES CARDS
300 DIM D(AK)
310 FOR B=1 TO AK
320 E=RND(AL)
330 IF C(E)=0 GOTO 320
340 IF C(E)>300 THEN C(E)=C(E)-200:I=1
350 D(B)=C(E)
360 IF I=1 THEN C(E)=0
370 IF I=0 THEN C(E)=C(E)+200
380 I=0
390 NEXT
700 DIM H$(4)
705 REM 710-735 SCOREBOARD INFORMATION
710 B=RND(2):IF B=2 THEN X=1
720 PRINT@353,"

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724 IF W=1 THEN X=0
725 PRINT@449,B#;" ";Y
726 IFW<>1 PRINT@464,A#;" ";Z
727 PRINT@425,"< SCOREBOARD >"
728 IF Z+Y=AL GOTO 12100
729 IF X=1 PRINT@353,A#
730 IF X=0 PRINT@353,B#
735 IF W=1 PRINT@464,"ATTEMPTS"; AC
738 REM 739-834 NUMBER SELECTION
739 C=1
740 IFR=4ANDAA=1ORR=4ANDAA=1ORR=4ANDG=1ORR=4ANDGG=1:C=3
741 A=0:AA=0:K=0:G=0:GG=0:NP=0
742 IFC=1:H$(1)="":H$(2)="":H$(3)="":H$(4)="
743 IFC=3:H$(3)="":H$(4)="
744 IFC=1 PRINT@418," "
746 IFC=3 PRINT@422," "
747 IFC=1THEN U=418
748 IFC=3 U=422
750 FOR R=C TO 4
755 IF R<=2 PRINT@385,"SELECT YOUR NUMBER "
760 IF R>=3 PRINT@385,"SELECT YOUR NUMBER "
765 F$=INKEY$
770 G$=INKEY$:IF G$="" THEN 765
775 IF G$="0"ORG$="1"ORG$="2"ORG$="3"ORG$="4"ORG$="5" THEN K=1
780 IFG$="6"ORG$="7"ORG$="8"ORG$="9" THEN K=1
785 IF K=1 THEN 790 ELSE 765
790 PRINT@U,G$
795 SOUND 31,1
800 U=U+1
810 IF U=420 LET U=422
815 H$(R)=G$
820 C$=H$(1)+H$(2)+H$(3)+H$(4)
825 D$=LEFT$(C$,2)
830 E$=RIGHT$(C$,2)
834 S=VAL(D$)
835 REM 836-970 NUMBER PARAMETERS CHECK
836 IF R=2 GOSUB 856:IF AA=1 OR G=1 OR GG=1 OR A=1 GOTO 739
837 IF R=2 GOTO 1020
840 T=VAL(E$)
841 IF R=4 GOSUB 856:IF AA=1 OR G=1 OR GG=1 OR A=1 GOTO 740
842 K=0
850 NEXT
852 PRINT@385," "
855 GOTO 1020
856 L=A(S):M=A(T)
857 IF R=2 N=PEEK(L):O=PEEK(L-1)
858 P=PEEK(M):Q=PEEK(M-1)
859 IF R=2:IF N<48 OR N>57 THEN LET A=1
860 IF R=4:IF P<48 OR P>57 THEN LET A=1
861 IF S>AK OR T>AK THEN G=1
862 IF R=4 AND S=T THEN AA=1
863 IF S=0 OR R=4 AND T=0 THEN GG=1
866 IF GG=1PRINT@385,"YOU WIN!";GOSUB12300
870 IFG=1PRINT@385,"YOU LOSE!";AK:GOSUB12300
872 IF AA=1PRINT@385,"TIE!";GOSUB12300
950 IF A=1ANDG=0ANDAA=0ANDGG=0 THEN LETNP=1
960 IFNP=1PRINT@385,"TIE SQUARE!";GOSUB12300
970 RETURN
1010 REM 1020-1120 DISPLAY SQUARE
1020 IF R=2 POKE A(S),D(S):POKE A(S)-1,D(S):SOUND1,1:GOTO 842
1040 POKE A(T),D(T):POKE A(T)-1,D(T)
1050 IF W=1 THEN AC=AC+1
1060 IF PEEK(L) = PEEK(M) GOSUB 3000 ELSE 1100
1080 GOTO 720
1100 SOUND 10,1
1105 PRINT@385,"MATCH!";
1110 FOR B=1 TO V:NEXT
1115 PRINT@385," "
1120 POKE L,N:POKE L-1,0:POKE M,P:POKE M-1,0
1130 REM 1140-1160 WHO GOES NEXT
1140 IF X=0 THEN X=1:GOTO 720
1160 IF X=1 THEN X=0:GOTO 720
2999 REM 3000-3160 SCOREBOARD
3000 PRINT@418," "
3007 IF X=0 PRINT@352," ";B#;" YOU MATCHED A PAIR"

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# VZ200/300 PROGRAMS

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3008 IF X=1 PRINT@352," ";A$;" YOU MATCHED A PAIR"
3009 SOUND 16,2;18,2;20,2;21,2;23,2;25,2;27,2;28,2
3010 IF W=1 GOTO 3140
3020 IF X=0 THEN Y=Y+1
3040 IF X=1 THEN Z=Z+1
3060 IF Z=Y=AL RETURN
3080 IFX=0 PRINT@385,"YOU CAN HAVE TWO MORE "
3100 IFX=1 PRINT@385,"YOU CAN HAVE TWO MORE "
3110 SOUND 10,2;20,2
3115 FOR B=1 TO V:NEXT
3120 RETURN
3140 Y=Y+1
3160 RETURN
10180 COLOR 8,1
10190 PRINT@99,"A GAME OF"
10200 PRINT@193,"CONCENTRATION"
10220 PRINT@433,"BY L.J VELLA"
10225 FOR B=1 TO 2000:NEXT
10230 CLS
10235 RETURN
10240 COLOR 2,0
10260 PRINT" "
10280 PRINT@32," 1 2 3 4 5 6 7 8 9 10 "
10300 PRINT@64," "
10310 IF AK>=20 PRINT@96," 11 12 13 14 15 16 17 18 19 20 "
10320 IF AK>=20 PRINT@128," "
10340 IF AK>=30 PRINT@160," 21 22 23 24 25 26 27 28 29 30 "
10360 IF AK>=30 PRINT@192," "
10380 IF AK>=40 PRINT@224," 31 32 33 34 35 36 37 38 39 40 "
10400 IF AK>=40 PRINT@256," "
10420 IF AK=50 PRINT@288," 41 42 43 44 45 46 47 48 49 50 "
10440 IF AK=50 PRINT@320," "
10445 PRINT@353," PLEASE WAIT WHILE I AM "
10450 PRINT@388," SHUFFLING THE CARDS "
10460 RETURN
10480 PRINT" SELECT THE NUMBER OF PLAYERS (1 OR 2)"
10481 FOR B=1 TO 200:NEXT
10482 F$=INKEY$
10483 H$=INKEY$:IF H$="" GOTO 10482
10484 W=VAL(H$)
10485 IF W=1 OR W=2 GOTO 10520
10490 CLS:PRINT@226,"YOU DID NOT PICK A (1) OR (2)"
10495 GOSUB 12300:CLS:GOTO 10480
10520 CLS:FOR B=1 TO 300:NEXT
10521 CLS:PRINT" ENTER THE NAME OF THE FIRST"
10522 INPUT" PLAYER AND PRESS RETURN ";B$
10523 IFLEN(B$)=0GOTO10521
10525 IF LEN(B$)<11 GOTO 10540
10530 CLS:PRINT@100,"YOUR NAME HAD MORE THAN"
10531 PRINT@138,"TEN LETTERS"
10535 GOSUB 12300:CLS:GOTO 10520
10540 IF W=1 THEN X=0:GOTO10580
10550 CLS:PRINT" ENTER THE NAME OF SECOND"
10555 INPUT" PLAYER AND PRESS RETURN ";A$
10560 IFLEN(A$)=0GOTO10550
10562 IF LEN(A$)<11 GOTO 10580
10564 CLS:PRINT@100,"YOUR NAME HAD MORE THAN"
10565 PRINT@138,"TEN LETTERS"
10566 GOSUB 12300:CLS:GOTO10550
10580 CLS:PRINT@99,"WOULD YOU PLEASE SELECT THE"
10582 PRINT@131,"AMMOUNT OF TIME THE SYMBOLS"
10584 PRINT@163,"STAY DISPLAYED ON THE SCREEN"
10586 PRINT@233,"1 = 1 SECONDS"
10588 PRINT@265,"2 = 2 SECONDS"
10590 PRINT@297,"3 = 3 SECONDS"
10591 PRINT@329,"4 = 4 SECONDS"
10592 PRINT@361,"5 = 5 SECONDS"
10594 F$=INKEY$
10595 H$=INKEY$:IF H$="" GOTO 10592
10597 V=VAL(H$)/2*1000
10598 IF V>=500 AND V<=2500 THEN GOTO 10599 ELSE 10594
10599 CLS
10600 CLS:PRINT@99,"WOULD YOU PLEASE SELECT HOW"
10601 PRINT@131,"MANY SQUARES YOU WOULD LIKE"
10602 PRINT@163,"TO PLAY AND THEN PRESS":PRINT@195,"RETURN"

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# VZ200/300 PROGRAMS

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10603 PRINT@227,"YOU CAN ONLY SELECT"
10604 PRINT@259,"10,20,30,40,OR 50"
10605 PRINT@292," "
10606 INPUT" ";AK
10607 IF AK=10 OR AK=20ORAK=30 OR AK=40 OR AK=50 THEN GOTO 10612
10609 CLS:PRINT@100,"YOU DID NOT SELECT"
10610 PRINT@132,"10,20,30,40,OR 50":GOSUB 12300
10611 GOTO 10600
10612 AL=AK/2
10619 CLS:RETURN
10620 CLS:AB=0
10630 COLOR,0
10635 PRINT"          INSTRUCTIONS"
10640 PRINT"          "
10660 PRINT"    YOUR GAME OF CONCENTRATION IS"
10680 PRINT@96,"VERY EASY TO PLAY.SIMPLY ATTEMPT"
10700 PRINT@128,"TO MATCH THE PAIRS OF SYMBOLS"
10720 PRINT@160,"HIDDEN BEHIND THE CARDS.IT CAN"
10740 PRINT@192,"BE PLAYED BY ONE OR TWO PERSONS."
10760 PRINT@224,""
10780 PRINT@256,"    INITIALLY THE COMPUTER THROWS"
10800 PRINT@288,"A DICE TO SELECT WHO GOES FIRST."
10810 PRINT@320,"NEXT THE COMPUTER WILL ASK IN"
10820 PRINT@352,"TURN,EACH PLAYER TO PICK THEIR"
10830 PRINT@384,"FIRST AND SECOND NUMBER,WHICH"
10840 GOSUB 12000
10850 PRINT"REPRESENTS TWO CARDS.IF THESE"
10860 PRINT@32,"TWO CARDS HAVE IDENTICAL SYMBOLS"
10870 PRINT@64,"THE CARDS WILL STAY DISPLAYED"
10880 PRINT@96,"AND THE COMPUTER WILL ALLOCATE"
10890 PRINT@128,"A POINT TO THE PERSON WHO SELEC-"
10900 PRINT@160,"-TED THEM,AS WELL AS GIVING THAT"
10910 PRINT@192,"PERSON ANOTHER TURN.IF THE TWO"
10920 PRINT@224,"ARE NOT THE SAME THE CARDS WILL"
10940 PRINT@256,"TURN OVER TO THEIR ORIGINAL NUM-"
10950 PRINT@288,"BER.THE IDEA OF THE GAME IS TO"
10960 PRINT@320,"REMEMBER WHAT SYMBOLS ARE UNDER"
10970 PRINT@352,"EACH CARD, SO AS TO ASSIST IN"
10980 PRINT@384,"SELECTING A MATCHED PAIR OF"
10990 GOSUB12000
11000 PRINT"CARDS LATER ON,THE PLAYER WITH"
11010 PRINT@32,"THE GREATEST NUMBER OF POINTS AT"
11020 PRINT@64,"THE END OF THE GAME WINS."
11030 PRINT@96,""
11040 PRINT@128,"    IF ONLY ONE PLAYER PLAYS,THE"
11050 PRINT@160,"COMPUTER SHOWS HOW MANY ATTEMPTS"
11060 PRINT@192,"WERE MADE TO DISPLAY ALL THE PA-"
11070 PRINT@224,"IRS OF SYMBOLS.WHEN A NUM-"
11080 PRINT@256,"BER BETWEEN 1 & 9 IS REQUIRED,"
11090 PRINT@288,"SELECT A ZERO FIRST.FOR EXAMPLE 01,05,09."
11420 PRINT@352,""
11440 AB=1
12000 PRINT@416,""
12020 F$=INKEY$
12040 H$=INKEY$:IF H$="" GOTO 12020
12060 IF H$="" GOTO 12080
12070 IF AB=1 AND H$="I" GOTO 10620
12075 GOTO 12020
12080 CLS:RETURN
12100 IF W=2 AND Z>Y PRINT@352," ";A$;" YOU WON      "
12120 IF W=2 AND Y>Z PRINT@352," ";B$;" YOU WON      "
12125 IF W=2 AND Y=Z PRINT@352,"      YOU BOTH WIN IT'S A DRAW  "
12130 IF W=2 PRINT@418,"      "
12140 IF W=1 PRINT@352,"      "
12155 IF W=1PRINT@418,B$;"      "
12160 IF W=1PRINT@448," YOU FINISHED IN";AC;"ATTEMPTS"
12220 PRINT@384,""
12230 SOUND 20,1;10,1;20,1;10,1;20,1;10,1
12240 F$=INKEY$
12260 H$=INKEY$:IF H$=""GOTO 12240
12280 IF H$="" THEN RUN ELSE 12240
12300 SOUND 31,1;29,1;27,1;25,1;23,1;21,1;19,1;17,1;15,1;13,1
12340 SOUND 11,1;9,1;7,1;5,1;3,1;1,1
12360 RETURN

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